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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,192	11/18/2003	Daniel Charles Heinz		3344

7590 09/13/2006
Steven Scott Lloyd
238 South Wolfe Street
Baltimore, MD 21231

EXAMINER

TORRES, ALICIA M

ART UNIT PAPER NUMBER

3671

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,192

Applicant(s)

HEINZ ET AL.

Examiner

Alicia M. Torres

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/11/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. Claim 1 is objected to because of the following informalities: the rotary cutting apparatus comprises the chassis, i.e. the chassis is part of the rotary cutting apparatus. Therefore, the chassis cannot be affixed to the rotary cutting apparatus. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 35 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original specification, filed 3 March 2004, fails to disclose a means for effecting movement that is robotic.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3671

4. Claims 18-25, 27, 28, 33, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. 2,478,558 in view of Shurman et al. 5,007,234.

Beranek et al. discloses a cutting apparatus comprising:

- A replaceable blade (23) perpendicularly fixed to the end of a drive shaft (22) connected to a replaceable power means (16), the shaft (22) at a fixed angle (when leaning resting on runner 27) tilted longitudinally between 1 and 90 degrees from vertical, the angle being adjustable (by tilting the chassis around the wheel axles, at 8)
- A grass guide (35) that bends to constrain grass to be cut by the blade (23, by enclosing the grass inside the guide, the guide constrains the grass)
- A chassis (4, 15)
- Means for effecting movement of the apparatus comprising:
 - A handle (5)
 - Wheels
- Wherein the power means comprises:
 - A single electric motor (16)
- Wherein the height of the cutting blade (23) is adjustable (by tilting the chassis around the wheel axles, at 8).

However, Beranek et al. fails to disclose:

- A plurality of blades projecting downward from a power means
- The power means comprising:
 - A plurality of small electric motors powered by a battery, or
 - An internal combustion engine.

Art Unit: 3671

Shurman et al. discloses a similar cutting device including:

- A plurality of blades (12a-12d) projecting downward from a power means (10a-10c)
- The power means comprising:
 - A plurality of small electric motors (10a-10c) powered by a battery (16), or
 - An internal combustion engine (col. 4, lines 49, 50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power sources of Shurman et al. on the cutting apparatus of Beranek et al. in order to provide energy efficiency.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shurman et al. and Beranek et al. as applied to claim 18 above, and further in view of Goman et al. 6,622,464.

The device is disclosed as applied above. However, the combination fails to disclose the power source comprising an internal combustion engine and an electric motor.

Goman et al. discloses a lawn mower having a power source (6) comprising an internal combustion engine and an electric motor (col. 8, lines 18-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power source of Goman et al. on the cutting apparatus of Beranek et al. and Shurman et al. in order to provide power to the cutting blade.

Art Unit: 3671

6. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. and Shurman et al. as applied to claims 23 and 24 above, and further in view of Paytas 4,987,729.

The device is disclosed as applied above. However, the combination fails to disclose wherein the power source comprises a battery and a solar cell.

Paytas discloses a mower having a power source comprising batteries (22, 24) and a solar cell (30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power source of Paytas on the cutting apparatus of Beranek et al. and Shurman et al. in order to reduce emissions.

7. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. and Shurman et al. as applied to claims 23 and 24 above, and further in view of Fillman et al. 6,571,542.

The device is disclosed as applied above. However, the combination fails to disclose wherein the motor is powered by a fuel cell.

Fillman et al. discloses a lawn mower with a motor powered by a fuel cell (24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the fuel cell of Fillman et al. on the cutting apparatus of Beranek et al. and Shurman et al. in order to provide a long lasting power source.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

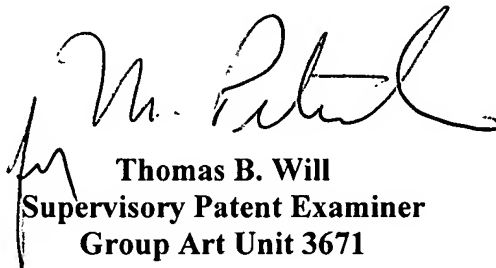
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Art Unit: 3671

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 571-273-8300.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT
September 7, 2006